

Version with Markings to Show Changes Made

1. (Amended) A base oil [composition] suitable for use in an engine oil which comprises [a] an oligomer mixture of trimer and higher oligomers derived from an alpha olefin feed consisting essentially of [either] 1-dodecene [or 1-tetradecene] wherein said oligomer mixture contains less than 2 weight percent of combined monomer and dimer.
2. (Amended) A base oil according to claim 1 wherein the base oil [composition] consists essentially of [only the] trimer and higher oligomers of [either] said 1-dodecene [or 1-tetradecene].
3. (Amended) The base oil [composition] of claim 2 wherein [the trimer and higher oligomers are derived from 1-dodecene] said alpha olefin feed consists essentially of at least 85% by weight said 1-dodecene.

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- 5 6. (Amended) An engine oil according to claim 5 having an SAE viscosity grade of 0W-20-40 comprising from 15 to 85% by weight of the base oil which is comprised of from 50 to 85% by weight of PAO, wherein at least 15% by weight of said PAO is derived from said 1-dodecene [or 1-tetradecene].
- 5 7. (Amended) An engine oil according to claim 5 having an SAE viscosity grade of 5W-20-50 comprising from 15 to 85% by weight of the base oil which is comprised of from 15 to 50% by weight of PAO, wherein at least 15% by weight of said PAO is derived from said 1-dodecene [or 1-tetradecene].
8. (Amended) An engine oil according to claim 5 having an SAE viscosity grade of 10W-20-50 comprising from 15 to 85% by weight of the base oil which is comprised of from 5 to 35% by weight of PAO, wherein at least 15% by

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5 weight of said PAO is derived from said 1-dodecene [or
1-tetradecene].

9. (Amended) A method for improving the thermal stability,
oxidative stability, and volatility characteristics of engine
oil which comprises using a base oil comprised of PAO
derived from a linear alpha olefin feed consisting
5 essentially of 1-dodecene [or 1-tetradecene].

13. (Amended) An engine oil able to pass the VW T-4, VW
TDI, or Sequence IIIE tests which comprises from about
5 to about 85 weight percent of a base oil, from 0 to
about 20 weight percent of at least one ashless
5 dispersant, from 0 to about 30 weight percent of
detergent, from 0 to about 10 weight percent of at least
one oxidation inhibitor, from 0 to about 1 weight percent
of at least one foam inhibitor, and from 0 to about 20
weight percent of at least one viscosity improver, wherein
10 the base oil comprises a mixture of trimer and higher

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oligomers derived from an alpha olefin feed consisting essentially of [either] 1-dodecene [or 1-tetradecene] and wherein said oligomer mixture contains less than 2 weight percent of combined monomer and trimer.

14. (Amended) The engine oil of claim 13 wherein the base oil consists of trimer and higher oligomers derived from said 1-dodecene.

New claims 15-28 have been added.

